FORESTRY IN EAST GIPPSLAND By J. A. MCKINTY

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Summary

Since the early years of settlement most of the forest of East Gippsland has sustained damage from wild fires. The opening of the railway to Orbost saw the commencement of selective utilization, which resulted in further degradation of adjacent forest stands. Despite geographical isolation a strong sawmilling industry has transferred into the region during the past twenty years, and currently produces 25 per cent of the State hardwood log output. Roading for utilization and fire protection has been developed in the forest area, but access to remote areas is still inadequate. Sawmilling has been organized so that significant economic advantage has been derived by communities with limited opportunity to develop by expansion of agriculture. Substantial agricultural expansion depends on alienation and development of land at present completely forested and contributing to the current log requirements of the saw-milling industry. Silvicultural improvement of the forest can be achieved by removal of residual trees and waste wood for utilization by a wood pulp industry.

Forest Reservation

In East Gippsland, reservation of large areas of forest has been possible because of remoteness from the pressure of expanding settlements, and difficulty of terrain. By the schedules of the 1907 Forests Act a total of almost 370,000 acres was reserved for forest purposes as follows:

Forest	Blocks	at	Bendoe	70,500	ac.
39	33	97	Noorinbee	139,608	ac.
	99	,,	Dellicknora	10,660	ac.
,,	,,,	>>	Nerran	35,600	ac.
22	99	,,	Orbost	30,440	ac.
.,	• 9	,,	Wulgulmerang	3,270	ac.
99	22	• •	(Part) Enano	11,470	ac.
99	• •	,,,	(Part) Tambo	60,620	ac.
* *	۰۶	,,,	(Part) Colquhoun	6,637	ac.
19	,,	"	Tildesley	860	ac.
Total				369,665	ac.

The majority of these forest blocks were remote from markets and some of the areas were apparently reserved, despite poor tree growth, as watershed protection areas.

With the construction of the railway to Orbost (1916), the forests within 10-15 miles of the line were tapped and utilized to produce sleepers and other hewn timbers. The undoubted value of these forests to this industry resulted in the dedication of 17,590 acres for forest purposes to the NE. of Nowa Nowa in 1916 and a further 30,000 acres W. of Orbost in 1930.

Minor adjustments were made to forest boundaries in 1935 by the excision of almost 3,000 acres in the vicinity of farming settlements; but a valuable belt of high quality forest of some 20,500 acres was reserved in the Goongerah-Bendoe area. In the Derndang-Wangarabelle area 3,716 acres of box forest was reserved in 1938, and subsequently over many years, yielded box poles and piles, and more than one million superficial feet of logs to provide durable timber used in the manufacture of Vietorian Railways rolling stock.

Abandoned farms in the dense forests of Murrungowar and Kuark added 3,690 aeres to the forest reserve in 1940, and an additional 5,030 aeres in 1949. The potential of this area for growth of forest can be gauged from the faet that the 80-90 ft test piles driven at Kings Bridge were eut here, as were four 120 ft poles, required for developmental structures at Woomera (1956).

With the support of Sir Albert Lind, Minister of Forests, and member for East Gippsland, an area of 163,000 aeres of forest extending from Orbost E. to beyond the Bemm River was reserved in 1951. This was the largest block of forest reserved in East Gippsland this century. Permanent reservation has ensured log supplies to local millers and the expenditure of Forests Commission funds in managing and regenerating the forest. The last major addition to the forest estate was in 1960 when 46,500 acres of prime forest on the Errinundra tableland was reserved. Since 1930 a total of 10,538 aeres of reserved forest area has been relinquished to adjust forest boundaries and to remove from the forest estate areas with low potential for forest growth.

The net area of forest reserve in eastern Gippsland is:

369,665 ac. 289,964		
659,629 10,629		
649,000 ac. net.		

This area comprises 11¹/₂ per cent of the total reserved forest area in the state, but is 25 per cent of the area of this part of East Gippsland. Land tenure within the region is as follows:

Protected Forest (unoccupied Crown lands)	1,611,000 ac.	61%
Reserved Forest	649,000 ac.	25%
National Parks	40,000 ac.	2%
Alienated Lands	300,000 ac.	12%
(4,100 sq. mls.)	2,600,000 ac.	

The imbalance between the area of permanent farmland, with its scattered population and small townships, and the huge area of forested land, indicates the degree of development that is still required in the region and the importance of the forest resource. A large proportion of the Crown land is forested and capable of yielding forest produce at the present time. However, the long rotation necessary to replenish the forests on sites of low productivity would not warrant permanent reservation, nor intensive management. Other large areas of Crown land, particularly in the Snowy River valley, do not carry merchantable timber and due to ruggedness of terrain are quite unsuitable for conversion to farmland. The vegetation forms a protection forest for these sites, and in future, portions of these areas may be reserved as National Parks or as Wilderness Areas.

The erop on Crown land is of importance to the timber industry at the present time, but in the future when the permanent forests are managed to produce the maximum growth from the site, it can be anticipated that Crown lands, and even some forest reserves of lower timber production potential, may be released for agricultural purposes.

Early Utilization

Pit sawing of timber at Bendoe, when gold mining was in progress there in 1852, may have been the earliest forest utilization in the region. A sawpit has also been discovered on the Nunniong tableland under Mt. Bindi; so it is reasonable to assume that pit sawing to produce better finished building and construction timbers may have been an adjunct to most of the early permanent settlements.

The opening of the Melbourne-Sale railway in 1878 and its extension to Bairnsdale in 1888 provided a ready outlet for produce cut from the forests adjoining the Gippsland Lakes. Milling had developed there previously to supply local needs, but now it was practicable for produce to be cut near the Lakes and transported by water and rail to an increasing market. At this distance from the market however, only special timbers, not readily available elsewhere, were in demand.

Eucalypt species that could supply heavy construction timbers, either sawn or hewn, were sought through these forests—red iron-bark, grey box, red gum and red box. The produce ranged from the red gum paving blocks for Melbourne streets to piles of iron-bark and box for harbour works; sawn red gum planks 12 in. x 2 in. and 35 to 45 ft long; and red gum beams for dock gates—42 ft long and 24 in. square. There is a record too of a grey box keel 66 ft long cut in these forests.

With this type of utilization the nearest and best trees were selected. The best tree was one with least defect that could supply the most timber for the effort of felling it. This type of selective logging left only trees of poor form and quality or those too remote for harvesting.

Until the railway extended to Orbost in 1916, the only forest utilization, other than for domestic needs, was in the vicinity of Lake Tyers, at Tabbara, and at Bendoc. However, large areas of forest received severe damage from the recurrent fires that escaped from the settlers' clearing operations or were lit to encourage growth of cattle feed on the floor of the forest.

Forest Fires

Forest fires have always been a factor of the environment of the region. In the past these had originated principally from natural causes, such as lightning; occasionally from the use of fire by aboriginals. Considering the uniform age of a forest stand of the ash group of eucalypts occurring in the region and the silvicultural requirement of the species for regeneration, it is evident that fires swept the forest at intervals during the pre-settlement period.

After the settlement of the limited areas of sparsely forested land, the pioneers turned to the less dense forest of the coastal plain and to the highly fertile soils of the river flats and valleys. The massive logs and accumulated debris were burned to prepare the land for pasture. This fuel was rarely dry enough to burn satisfactorily, except in summer, and inevitably these clearing fires escaped. Scars in the forest from escape fires are clearly shown by the dead stags and dead-topped trees in the Combienbar and Errinundra valleys.

Stock was grazed in the forests around settlements, and experience had shown that eattle would thrive on the regeneration of grass, herbs and shrubs following a fire. Two to three years after burning, palatable feed became scarce. Another section of the forest would then be fired because the accumulation of at least five years forest litter was necessary before burning could be repeated successfully on any area.

Many of the Crown lands were made available by the Lands Department as grazing leases of some 30,000 acres each. It was incvitable that systematic burning was used to promote the growth of forage. Although cattlemen wanted a localized fire which limited the far ranging of stock, the timing of the burn was difficult, and instead of a low intensity fire burning under climatic controls late in the season, forest fires often raged out of control.

The chaotic structure of the forest stands of the foothills and mountain slopes is a result of repeated burning of the forests in the past. There are few areas with no evidence of past fires, and many which have been swept by fires recurrent and intense. The species of the coast and foothills are fire resistant, and although mature trees are only sometimes killed by burning, dense regeneration of eucalypt saplings and scrub is often induced by fire.

Later fires reduce this sapling regrowth, but the survival of stems that regenerate new crowns, or coppice from the butt, with the older trees, overstocks the forest site. Older trees with fire scars are susceptible to attack by termites, longicorn beetles and fungi; and the timber has suffered degrade through the presence of kino in the form of gum veins and pockets in the wood. Competition in the over-stocked stands results in retarded growth of all stems, rendering them susceptible to insect and fungal attack.

Recurrent fires sweeping through regeneration of varying age and stocking, followed by a fresh erop of regeneration, have caused a wide variety of irregular age classes and a variety of stocking densities.

The Hewn Timber Industry

The extension of the railway to Nowa Nowa (1914) and to Orbost (1916) opened up forests of 'hardwood' eucalypt species acceptable for railway sleepers, viz: red iron-bark (*E. sideroxylon*, A. Cunn.), Gippsland grey box (*E. bosistoana*, F.v.M.), red box (*E. polyanthemos*, Schau), and yellow stringybark (*E. muelleriana*, Howitt).

Beams hewn from these species were also in demand for heavy wooden constructions, wharfs, bridges, etc. Some control was excreised in the forest to ensure that immature trees were not utilized and that larger trees were reserved to supply beam timber.

The sleeper hewer was a contractor to the Railways Department on piece work, and largely dependent for his livelihood on the Railway requirement of sleepers. The more skilful hewers were able to increase their earnings by supplying beams and octagonal dressed poles.

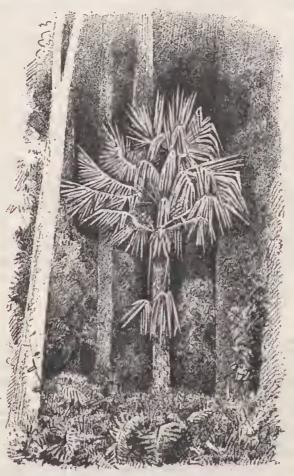
By 1920 some 60 per cent of the State requirement of hewn beams and 25 per cent of the sleepers were being produced from the east of Nowa Nowa. The revenue derived however, was only 3 per cent of the Forests Commission's income. During the depression, Railway requirements of sleepers were allocated in small lots or quotas to up to 320 hewers in the area to provide a subsistence income. This quota system has continued to be a feature of the contract between the hewer and the Railways Department.

As suitable timber for hewing became depleted within wagon reach of the railway, the sleeper carters invested in motor lorries. By 1930 timber stands 20 miles from rail were being utilized and the Forests Commission by 1935 was assisting to establish roads to suitable stands of timber at greater distances.

In view of increasing difficulty in obtaining supplies of the 'hardwood' sleepers the Railways in 1938 accepted supply of sleepers cut from southern mahogany (*E. botryoides*, Sm.), white stringybark (*E. scabra*, Dum-Cours.), and messmate stringybark (*E. obliqua*, L'Her), and in addition in 1943, Yertchuk (*E. consideniana*, Maiden), became an acceptable species. Any 'hardwood' sleepers supplied fetched a slight premium in price.

During the 1939-45 war period the Railways requirement of sleepers was reduced to a minimum and only 55 hewers were in employment in the area.

The post-war period saw an increase in sleeper prices to attract hewers into the industry, but the output of sleepers per man did not increase correspondingly. The reverse was the case and the hewer worked shorter hours to obtain sufficient sleepers to provide an income slightly better than day wages. Further concessions were made by the Railways in 1946 when mountain grey gum (*E. cypellocarpa*, L. Johnson), blue gum (*E. bicostata*, Maiden, Blakely and Simmonds), and red stringybark (*E. macrorrhyncha*, F.v.M.) were accepted, and in 1948 silvertop (*E. sièberi*, L. Johnson), in an attempt to overcome deficiencies in railway track main-



A young cabbage tree palm which has not yet grown above the tops of the surrounding trees. (W. B. Spencer, 1889.)

tenance brought about by the war years. In 1947 there were 105 hewers in the industry, but the Railways requirement of sleepers exceeded the supply.

In order to overcome deficiencies in supply the Railways sought sawn sleepers from the saw mills and introduced mobile benches into the forest to saw sleepers from cull trees. This permitted an opportunity for unskilled New Australians and, as well as the chain saw, they introduced the mobile swing saw to the industry. This marked the end of the need for the hewer's particular skill, and during the decade from 1950 mechanization has resulted in a revolution of the sleeper industry.

The Railway requirement for sleepers that had been in the order of 250,000-350,000 per year pre-war increased in post-war years to 500,000-600,000 per year. Until 1950 East Gippsland supplied some 25 per cent of the requirement but since that date, 45-50 per cent of the total sleepers produced have come from east of Nowa Nowa. The work force engaged in the industry has varied between 102 in 1950 to 192 in 1955, but 1966 saw a decline to only 70, following a decrease in the requirement by the Railways.

The 1955 pattern of production that supplied 278,000 sleepers (46 per cent of State requirement), was 3 benches, 28 swing saws and 75 broad-axcmen, a work force of 192. With the industry re-established and capable of supplying the annual requirement, the Railways in 1957 ceased to accept sleepers from those species introduced after 1946, and from messmate. By 1966 the broadaxc had practically disappeared, but only 126,800 sleepers (26 per cent of requirement) were produced by 70 operators.

In addition to sleepers for the Victorian Railways the period 1940-56 saw the production east of Genoa of sleepers for export from Eden to New Zealand. At various periods sleepers have been cut for the Melbourne and Metropolitan Tramways Board and for the State Electricity Commission.

The output of hewn bcams, once of considerable importance in this area, has now declined, as such timbers can be largely replaced by sawn products.

During the past 50 years the hewing industry has required the utilization of from 5-15 million superficial feet (s.ft) Hoppus Log Volume (H.L.V.) per year for the production of sleepers, beams, crossing timbers etc. Despite additional species being acceptable for sleepers for a period, the continuous selection of merchantable trees for conversion has resulted in degeneration of the forest stands of the coastal plain and lower foothills. The remaining faulty old trees and suppressed stems of poor form produce only inferior wood and distance from markets has made this economically unusable.

The Sawmilling Industry

Sawmilling was by 1946 centred at Nowa Nowa (one mill) Cabbage Tree Creek (one mill), Orbost (one mill), Bendoc (three mills) and Bonang (one mill), but the annual log requirement was less than five million s.ft per year. There was an intermittent demand for logs to supply special class timbers and up to 500,000 s.ft H.L.V. was despatched by rail to Melbourne. Log despatches comprised logs of blue gum to State Electricity Commission, iron-bark and messmate to Victorian Railways, and even kanooka (*Tristania laurina*, R.Br.) for manufacture of tobacco pipes.

Sawn timber was largely despatched to towns close to the area but a proportion found a market in the Latrobe Valley. The Public Works Department, Harbour Trust and Country Roads Board had a firm requirement for timber of special dimensions cut largely from yellow stringybark. Silver wattle (*Acacia dealbata*, Link.) case material was supplied for fish cases at Eden and Sydney, and for butter boxes at local factories and further afield.

The manpower shortage during the war restricted sawmilling in the region, and the majority of the mills in the State were geared to the salvage of the mountain ash forests destroyed in the 1939 fires. Although milling of salvage logs continued until the fifties, by 1946 the growing demand for timber and the depletion of logs from salvage sites, caused millers from the central areas of the State to seek log allocations from the forests of East Gippsland. After formulation of cutting plans, the 'Forests Commission granted log allocations and 1947 saw the first of these new sawmills in production at Cabbage Tree Creek. Two more mills commenced in Orbost in 1948, another in 1949, and in 1950 two more in Cabbage Tree Creek and another at Waygara.

The industry that transferred to the region had well-established customers, marketing procedures, and timber yards. Management and employees were skilled in logging and milling, and had the advantage of techniques developed during the ash salvage programme: the bulldozer for snigging and road construction, the articulated timber jinker for log cartage, and the recently developed chainsaw for improved log production.

The trickle of sawn timber from East Gippsland now became a steady stream as annual intake of logs climbed by 1950 to a volume of 25 million s.ft H.L.V. Although a large volume of production for this region, it represented only 7 per cent of hardwood log intake for the State. When the economic recession occurred in 1952, thirty-four sawmills were located in twelve settlements in the region (see Appendix 1).

Despite decreased production due to economic restrictions over the ensuing two years, additional mills opened at both Waygara and Cabbage Tree Creek (36 total). In 1955 log intake to these mills had climbed to 65 million s.ft H.L.V., representing 15 per cent of the State hardwood log intake. Additional mills were established in 1956 at Bendoc, Sardine Creek and Club Terrace (39 total).

Except at Bendoe and Gelantipy the East Gippsland mills were established to draw logs from the forests of the coastal and foothill zones. These forests yielded scantling and a useful proportion of merchantable timber, and special construction timber from durable species. The harvesting operation was by tree selection, which although preserving advanced regrowth, results in the faulty and suppressed stems becoming an increasing proportion of the forest.

High grade timber suitable for production of quality boards, dressed floorings, lining, and joinery, was produced at Gelantipy, Bendoc and eventually at Buchan and Nowa Nowa when the forests of Nunniong tableland were opened to utilization.

During the past decade additional allocations of logs from the coastal and foothill forests have been made, principally for mills establishing in Cann Valley, Bemm River, etc. The forest of the Errinundra tableland and adjacent valley heads contains a high proportion of shining gum (*E. nitens*, Maiden), cut tail (*E. fastigata*, Deane & Maiden), mountain ash (*E. regnans*, F.v.M.) and alpine ash (*E. delegatensis*, R. T. Baker), and this forest was reserved from utilization.

During the past few years supplies of high grade timber in the Central Highlands and North Gippsland have diminished, and allocations of logs from the high quality forest of the Errinundra tableland have now been made. Additional plants to mill this timber have been established, or are projected for early construction.

At the present time forty-three sawmills are based on sixteen settlements in East Gippsland. (See Appendix 1.) During the past financial year, out of an

available allocation of 121 million s.ft, these mills utilized 107 million s.ft, contributing 25 per cent of the State hardwood log requirement.

Forests Commission Activities

(a) FIRE PROTECTION

Supervision of forest operations in East Gippsland was strengthened in 1920 by the addition of professional foresters to the staff. Although responsible for fire protection in the whole of the region, the forester was not aware of fires which often occurred in remote areas. Telegraphic communication was lacking, and horse transport precluded the possibility of reaching a fire when it was at a controllable size. Additional staff, recruited from among experienced forest workers, provided closer supervision of utilization and permitted development of fire protection and fire suppression, within the vicinity of the railway and southern settlements.

To facilitate the expansion of the hewing industry to more remote forests, construction of extraction roads to a developmental plan began about 1935, and the forester was issued with motor transport to permit more adequate supervision. There were less than 60 miles of trafficable road within the forested area in 1939, although there were many hundreds of miles of abandoned sleeper tracks which were suitable for rapid improvement for light traffic.

The havoc of the 1939 fires gave impetus to the construction of roads through the forests, primarily to provide a means of rapid access to fires. Plans for these roads embraced the whole of the State Forest and with the provision of such earth moving machinery and labour as was available during the war years, old sleeper tracks, mining and coach roads were opened up and improved to the extent of some 200 miles a year.

Concurrently, fire spotting towers were erected across the area linked by over two hundred miles of Forests Commission telephone line. It was practicable for tower men in Cann Valley to check smoke sightings with towers in Orbost, Nowa Nowa and Bruthen areas.

During post-war reconstruction, earth-moving plant bccame more readily available and the labour force increased to more than seventy men. Up to fifty miles of roads on entirely new alignments and across difficult forest terrain were completed each year. With the introduction of four-wheel-drive vehicles after 1946 the roading plan was amplified by the inclusion of a system of bulldozer constructed 'jeep' tracks which provided for rapid transport of crews to fires in remote areas.

Forestry operations have provided employment for many years for at least fifty residents of sixteen settlements in and adjoining the region. As well as roads and tracks constructed by the Forests Commission for fire protection, logging units have been closely roaded by the sawmilling industry for log extraction. Within the forested area there are now more than 5,000 miles of vehicular access track and a considerable further mileage of abandoned track that can be opened quickly for use in a fire emergency.

Although roading intensity is high within the vicinity of settlements, main through roads and logging areas, there are remote areas into which access is still being developed. Construction of further access, to permit rapid movement of fire crews, will for some years be a feature of Commission developmental work in East Gippsland.

(b) MANAGEMENT AND SILVICULTURE

As previously indicated, the forest of a large part of the region has become decadent through excessive firing, overstocking, and where selective felling had been practised, through increase in the proportion of defective trees in the crop.

The primary objectives of management must be the replacement of decadent and unhealthy stands with vigorous forest of maximum productivity, yielding highest quality mill logs, round timbers and special construction timbers, while preserving site factors and stream flow characteristics.

Rehabilitation of the forest requires the removal of all unproductive trees as well as those yielding merchantable logs, and the establishment of regeneration with a regular distribution of age classes.

Logging operations are closely supervised by forest officers to ensure the felling of all trees likely to yield logs suitable for milling. Since 1954 the felling of doubtful trees has been encouraged by the Forests Commission, by payment for the felling of specified trees which subsequently failed to yield a merchantable log. Millers requiring logs in addition to their normal allocation are permitted to 'scavenge' for logs from trees remaining on areas that are considered completely cut-over. Mobile benches too, have been used in the forest, to saw sleepers from trees left standing after logging operations have been completed.

In spite of close utilization a high proportion of the original forest remains on most cut-over areas and impedes the development of regeneration.

(c) ORGANIZATION OF SAWMILLING

Before 1939 it was usual for a sawmill to be located close to, or within, the forest from which logs were obtained. Mill workers, and often their families, resided at the mill and where the labour force was large some facilities such as school and post office were also established. When accessible mill logs were utilized, the mill shifted to another part of the forest or to another area. The living conditions of mill workers were primitive and lacking amenities. Adjoining communities derived little lasting benefit from the temporary operation of the mill.

The destruction of mills and loss of life in the bush fires of 1939 necessitated that in future mills be located outside the forest, and that fire protection safeguards be implemented to protect life and property. The development of machinery for roading into forest stands and the cartage of logs for a considerable distance permitted the sawmilling industry to be organized to the benefit of the employer, the employees and the rural communities.

The utilization plan implemented by the Forests Commission for the East Gippsland forests defined Logging Units from which saw-millers were granted annual allocations of logs. The plan specified the locations at which the logs were to be converted. The log resource of the Logging Units was sufficient to permit the saw-millers to install efficient plants and provide comfortable housing for employees. This arrangement has proved of benefit to townships in the region, as increased population has resulted in better services.

For the mill worker and his family it has provided social, educational and recreational facilities previously limited or remote. It has enabled the employer to stabilize his work force by being able to provide better living conditions in relatively remote areas.

The grouping of mills in Conversion Centres has permitted the development of fire protection plans to safeguard settlements from external fires and to isolate fires originating within settlements. The sawmillers undertake to take part in suppression of forest fires and their labour force has played a significant part in these operations.

Contribution of the Timber Industry to East Gippsland and Future Trends

Establishment of the sawmilling industry has resulted in significant development in East Gippsland over the past twenty years. The industry at present employs 688 men in felling, milling and transport of forest produce. Another 70 men are engaged in the sleeper industry, forestry operations employ 65 men and Forests Commission supervision and administration employ an additional 28 men. The income of more than 800 persons, some 15 per cent of the population, is derived from forest utilization, and contributes to the economy of the region.

Sawmillers' housing for employees totals 260 at present and a further 126 huts are available for accommodation of single men. The location of mill employees and families in the small townships has often necessitated improvement of communication, educational and recreational facilities. This improvement has been most marked in Cabbage Tree Creek, Cann River and Club Terrace (See Appendix 1). Although sawmillers provide accommodation for 50 per cent of the work force, this is a lower ratio than was housed fifteen years ago, indicating that some employees have obtained their own homes and have become permanent residents of the region.

Furthermore, logging contractors have obtained undeveloped land and brought it into production, by utilizing their plant for clearing at times when the plant would otherwise be idle.

Additional mills with an allocated log intake of 17 million s.ft H.L.V. are projected for construction at Orbost (1), Combienbar (1), and Cann Valley (3). Total log allocation from the forests of the region will then be 136 million s.ft H.L.V. per annum.

In the procurement of 107 million s.ft of mill logs during the past year sawmillers cut over a total area of 17,200 acres of forest. The yield from each acre was in the order of 6,000 s.ft H.L.V. Although some areas yielded a greater volume, in general there is up to five times this volume remaining in trees not suitable for mill logs. Hence, although portion of the site can be regenerated, this large residue must be removed before the forest area can be brought into full production.

East Gippsland is outside the economic range for supply of the residue to established wood pulp industries, but the wood pulp industries of Japan, together with Australian timber companies are investigating the possibility of obtaining this material for export as chips to Japan. To make this operation economic would require the production of 300,000 tons of chips per year for a period of 10 years. This is the equivalent of logging some 100 million s.ft H.L.V. and would require the employment of at least 300 men during the period. A programme of utilization on this scale would be welcomed to dispose of milling and logging residues and to remove from the forest material not at present marketable. As well as providing substantial silvicultural improvement to the forest, the project could result in further impetus to the economic development of the region.

FORESTRY IN EAST GIPPSLAND

APPENDIX 1

EXPANSION OF SAWMILL EMPLOYMENT AND HOUSING 1952-1967

	1952—34 Sawmills			1967—43 Sawmills		
	Employees Accommodation		Employees	Accommodation		
		Houses	Huts		Houses	Huts
Bemm River				30	9	14
Bendoc	33	5	8	57	7	12
(Delegate N.S.W.)	1			10	7	3 3 6 7
Bonang Buchan	15	3	3	13 29	6 16	3
Cabbage Tree Creek	95	52	24	110	57	07
Cann River	16	2	24	73	42	24
Club Terrace	50	2 5	9	82	13	30
Combienbar			_		er Construe	
Gelantipy	12	3	4	16	10	4
Genoa				4		—
Goongerah	_		—	20	5	8
Maramingo Creek			—	5	1	—
Martins Creek	7	1	_			
Murrungowar Noorinbee North	6	2	2		2	1
Nowa Nowa	38	4	2	8 79	3	1 2
(Lakes Entrance)	50	4	2	19	3 8 7	
Orbost { Newmerella }	102	40	13	92	63	3
Sardine Creek				25	5	8
Waygara	63	2	10	45	1	1
	452	123	76	688	260	126